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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER				
PARSLEY, DAVID J				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/757,116

Applicant(s)

ALEXANDER, KAROLEEN B.

Examiner

DAVID J. PARSLEY

Art Unit

3643

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,10-21 and 41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,10-21 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Detailed Action

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4-14-09 has been entered.

Claim Objections

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 22 has been renumbered 41.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 3-5, 7, 10-21 and 41 (claim number 22 as filed by applicant) are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitations of "...the first weight percentage of the butadiene rubber granules varying relative to the second weight percentage of peelings or buffings to increase the porosity of the base layer depending on tree density around the sidewalk..." in claim 1 are not described in applicant's specification. Further, the limitations of "...the weight proportion of the granules to the peelings or buffings being about 1:1 to provide a first porosity for the sidewalk and about 7:3 to provide a second porosity for the sidewalk..." in claim 22 are not described in applicant's specification. The 1:1 ratio of weight proportion appears to be described in applicant's specification in relation to a tree skirt application and not for the sidewalk application as claimed and applicant's specification appears to not disclose a sidewalk comprising multiple sections of differing porosity. Further, the limitations of "...the weight proportion of the granules to the peelings or buffings in the base layer vary between a first porosity and the second porosity depending on the density of trees around the sidewalk..." in claim 22 are not described in applicant's specification.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by EP Patent No.

0135595.

Referring to claims 1 and 3, the European patent discloses a structure for placement on the ground and designed for people to walk upon comprising, a porous base layer of a combination of butadiene rubber in a first weight percentage and peelings or buffings in a second weight percentage and a first binder – see the English abstract and a wear layer of ethylene propylene diene monomer (EPDM) and a second binder on top of the base layer - see the English abstract which describes a first layer being hardened and then adding another layer of EPDM and a binder. The European patent further discloses the rubber of the base layer is a butadiene rubber being industrial rubber – see the English abstract. The European patent further discloses the butadiene rubber is in granular form – see the English abstract. The European patent further discloses the rubber is in the form of peelings and/or buffings - see the English abstract. As seen in the English translation the device of the European patent is described as web material which implies a woven and not completely solid structure which will allow for the device to be porous. The European patent does not specifically disclose the first weight percentage of the butadiene rubber granules is varied relative to the second weight percentage of the peelings or buffings is varied increase the porosity of the base layer depending on tree density around the sidewalk. However, these are product by process limitations in an apparatus claim and therefore these limitations are considered but they offer no further structural limitations to the apparatus claims

and it is deemed that the device of the European patent can be made using these product by process limitations so as to allow for the device to have the desired material properties.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent as applied to claim 2 above, and further in view of U.S. Patent No. 6,602,586 to Kakimoto et al or U.S. Patent Application Publication No. 2003/0091831 to Mickey.

Referring to claim 4, the European does not disclose the binder is isocyanate polyurethane. Kakimoto et al. and Mickey each disclose a layer of material comprising EPDM and a polyurethane isocyanate binder – see column 4 lines 15-65 of Kakimoto et al. and paragraphs [0016] thru [0018] of Mickey. Therefore it would have been obvious to one of ordinary skill in the art to take the device of the European patent and add the binder being isocyanate polyurethane of Kakimoto et al. or Mickey, so as to allow for the device to be strengthened and thus more durable.

Referring to claim 5, the European as modified by and Kakimoto et al. and the European patent as modified by Mickey does not disclose the ratio of binder to rubber is 16% by weight. However, this limitation is found through experimentation and it would have been obvious to

one of ordinary skill in the art to take the device of the European as modified by Kakimoto et al. and the European patent as modified by Mickey and add the ratio of binder to rubber being 16% by weight, so as to allow for the device to be strengthened and thus more durable.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent as applied to claim 6 above, and further in view of U.S. Patent No. 5,396,731 to Byrne.

Referring to claim 7, the European patent does not disclose the rubber granules are in the range of 1.5 to 6 mm. Byrne does disclose the rubber granules are in the range of 1.5mm to 6mm – see for example column 4 lines 17-27. Therefore it would have been obvious to one of ordinary skill in the art to take the device of the European patent and add the rubber granules being between 1.5 and 6mm of Byrne, so as to allow for the device to be made compact.

Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over The European patent as applied to claim 9 above.

Referring to claims 10-11, the European patent does not disclose the mixture of granules to peelings or buffings is either 70% granules and 30% peelings or buffings or 50% granules and 50% peelings or buffings. However, these are limitations found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of the European patent and add the mixture of either 50 or 70% buffings and either 30 or 50% peelings or buffings, so as to allow for the device to be of a natural appearance.

Referring to claim 12, the European patent further discloses the rubber of the base layer is a butadiene rubber being industrial rubber – see the English abstract.

Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent as applied to claim 2 above.

Referring to claims 13-14, the European does not disclose the base layer is 1 ½ to 3 ½ inches or 2 inches thick. However, these limitations are found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of the European patent and add the base layer being 1 ½ to 3 ½ inches or 2 inches thick, so as to allow for the device to be made of sufficient size to make the device durable for outdoor use.

Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent as applied to claim 1 above, and further in view of Kakimoto et al. or Mickey.

Referring to claim 15, the European does not disclose the second binder is isocyanate polyurethane. Kakimoto et al. and Mickey each disclose a layer of material comprising EPDM and a polyurethane isocyanate binder – see column 4 lines 15-65 of Kakimoto et al. and paragraphs [0016] thru [0018] of Mickey. Therefore it would have been obvious to one of ordinary skill in the art to take the device of the European patent and add the binder being isocyanate polyurethane of Kakimoto et al. or Mickey, so as to allow for the device to be strengthened and thus more durable.

Referring to claim 16, the European patent as modified by Kakimoto et al. and the European patent as modified by Mickey both do not disclose the ratio of binder to rubber is 20% by weight. However, this limitation is found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of the European patent as modified by Kakimoto et al. and the European patent as modified by Mickey and add the ratio of binder to rubber being 20% by weight, so as to allow for the device to be strengthened and thus more durable.

Referring to claim 17, the European patent as modified by Kakimoto et al. and the European patent as modified by Mickey further discloses the EPDM is granular – see the English abstract of the European patent.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent as modified by Kakimoto et al. and the European patent as modified by Mickey as applied to claim 17 above, and further in view of U.S. Patent No. 5,396,731 to Byrne.

Referring to claim 18, the European patent as modified by Kakimoto et al. and the European patent as modified by Mickey does not disclose the rubber granules are in the range of 1.5 to 6 mm. Byrne does disclose the rubber granules are in the range of 1.5mm to 6mm – see for example column 4 lines 17-27. Therefore it would have been obvious to one of ordinary skill in the art to take the device of the European patent as modified by Kakimoto et al. and the European patent as modified by Mickey and add the rubber granules being between 1.5 and 6mm of Byrne, so as to allow for the device to be made compact.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent as applied to claim 1 above, and further in view of U.S. Patent No. 4,205,102 to Schuurink et al.

Referring to claim 19, the European patent does not disclose the binder contains aliphatic diisocyanate. Schuurink et al. does disclose the binder contains aliphatic diisocyanate – see for example claim 3. Therefore, it would have been obvious to one of ordinary skill in the art to take the device of the European patent and add the binder containing aliphatic diisocyanate of Schuurink et al., so as to allow for the device to be strengthened and thus more durable.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent as modified by Schuurink et al. as applied to claim 19 above, and further in view of U.S. Patent No. 5,396,731 to Byrne.

Referring to claim 20, the European patent as modified by Schuurink et al. does not disclose the rubber granules are in the range of 1.5 to 6 mm. Byrne does disclose the rubber granules are in the range of 1.5mm to 6mm – see for example column 4 lines 17-27. Therefore it would have been obvious to one of ordinary skill in the art to take the device of the European patent as modified by Schuurink et al. and add the rubber granules being between 1.5 and 6mm of Byrne, so as to allow for the device to be made compact.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent as applied to claim 1 above.

Referring to claim 21, the European patent does not disclose the base layer 2 to 3 inches thick and the wear layer is 3/8 to 1/2 inch thick. However, these limitations are found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of the European patent and add the base layer being 2-3 inches thick and the wear layer being 3/8-1/2 inch thick, so as to allow for the device to be of sufficient size to be durable for outdoor use while not being too bulky for transport.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over the European Patent in view of either Kakimoto et al. or Mickey.

Referring to claim 22, the European patent discloses a structure for placement on the ground and designed for people to walk upon comprising, a porous base layer of a combination of butadiene rubber in a first weight percentage and peelings or buffings in a second weight

percentage and a first binder – see the English abstract and a wear layer of ethylene propylene diene monomer (EPDM) and a second binder on top of the base layer - see the English abstract which describes a first layer being hardened and then adding another layer of EPDM and a binder. The European patent further discloses the rubber of the base layer is a butadiene rubber being industrial rubber – see the English abstract. The European patent further discloses the butadiene rubber is in granular form – see the English abstract. The European patent further discloses the rubber is in the form of peelings and/or buffings - see the English abstract. As seen in the English translation the device of the European patent is described as web material which implies a woven and not completely solid structure which will allow for the device to be porous. The European patent does not specifically disclose the first weight percentage of the butadiene rubber granules is varied relative to the second weight percentage of the peelings or buffings is varied increase the porosity of the base layer depending on tree density around the sidewalk. However, these are product by process limitations in an apparatus claim and therefore these limitations are considered but they offer no further structural limitations to the apparatus claims and it is deemed that the device of the European patent can be made using these product by process limitations so as to allow for the device to have the desired material properties. The European patent does not disclose the mixture of granules to peelings or buffings is 70% granules and 30% peelings or buffings to provide a second porosity and the mixture of 50% granules and 50% peelings or buffings to provide a first porosity. However, these are limitations found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of the European patent and add the mixture of either 50 or 70% buffings and either 30 or 50% peelings or buffings, so as to allow for the device to be of a natural appearance.

The European patent does not disclose the second binder is isocyanate polyurethane. Kakimoto et al. and Mickey each disclose a layer of material comprising EPDM and a polyurethane isocyanate binder – see column 4 lines 15-65 of Kakimoto et al. and paragraphs [0016] thru [0018] of Mickey. Therefore it would have been obvious to one of ordinary skill in the art to take the device of the European patent and add the binder being isocyanate polyurethane of Kakimoto et al. or Mickey, so as to allow for the device to be strengthened and thus more durable.

Claims 1-3, 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,818,278 to Blythe in view of U.S. Patent No. 5,396,731 to Byrne.

Referring to claims 1, 3 and 12, Blythe discloses a structure for use on the ground for people to walk upon comprising, a base layer of rubber – see column 1 lines 1-20, and a wear layer of EPDM and a binder on top of the base layer – see column 1 lines 1-20 and Examples A and B in column 4. Blythe does not disclose the base layer has a binder. Byrne does disclose the base layer – at 16 comprises rubber and a binder – see column 4 lines 7-64. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Blythe and add the base layer with binder of Byrne, so as to allow for the components of the base layer to be securely held together. Blythe as modified by Byrne further discloses the rubber of the base layer is a butadiene rubber from tires – see column 4 lines 17-27 of Byrne. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Blythe and add the base layer with rubber and binder of Byrne, so as to allow for the components of the base layer to be securely held together and thus more durable. Blythe as modified by Byrne further discloses the butadiene rubber is in granular form – see column 1 lines 1-20 of Blythe and column 4 lines 17-27 of Byrne. Blythe as modified by Byrne further discloses the butadiene rubber is in the form of

peelings and/or buffings - see column 4 lines 7-64 of Byrne. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the peelings and buffings of Byrne, so as to allow for the device to be easier to manufacture. Blythe as modified by Byrne further discloses a porous base layer - see the abstract of Byrne and the weight percentage of rubber granules and peelings or buffings is varied in amount relative to one another to increase or decrease the porosity of the base layer - see columns 4-5 of Byrne where the amount of rubber in the device can be varied to differing percentages of weight of the device. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the porous base layer of Byrne, so as to allow for proper drainage through the device during use. Blythe as modified by Byrne does not specifically disclose varying the weight percentages of the granules and peelings or buffings to increase the porosity depending on tree density around the device. However, these are product by process limitations in an apparatus claim and therefore these limitations are considered but they offer no further structural limitations to the apparatus claims and it is deemed that the device of the European patent can be made using these product by process limitations so as to allow for the device to have the desired material properties.

Referring to claim 7, Blythe as modified by Byrne further discloses the rubber granules are in the range of 1.5mm to 6mm - see for example column 4 lines 17-27 of Byrne. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the rubber granules being between 1.5 and 6mm of Byrne, so as to allow for the device to be made compact.

Referring to claims 10-11, Blythe as modified by Byrne does not disclose the mixture of granules to peelings or buffings is either 70% granules and 30% peelings or buffings or 50% granules and 50% peelings or buffings. However, these are limitations found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the mixture of either 50 or 70% buffings and either 30 or 50% peelings or buffings, so as to allow for the device to be of a natural appearance.

Referring to claims 13-14, Blythe as modified by Byrne not disclose the base layer is 1 ½ to 3 ½ inches or 2 inches thick. However, these limitations are found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the base layer being 1 ½ to 3 ½ inches or 2 inches thick, so as to allow for the device to be made of sufficient size to make the device durable for outdoor use.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blythe as modified by Byrne as applied to claim 2 above, and further in view of U.S. Patent No. 6,602,586 to Kakimoto et al or U.S. Patent Application Publication No. 2003/0091831 to Mickey.

Referring to claim 4, Blythe as modified by Byrne does not disclose the binder is isocyanate polyurethane. Kakimoto et al. and Mickey each disclose a layer of material comprising EPDM and a polyurethane isocyanate binder – see column 4 lines 15-65 of Kakimoto et al. and paragraphs [0016] thru [0018] of Mickey. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the binder being isocyanate polyurethane of Kakimoto et al. or Mickey, so as to allow for the device to be strengthened and thus more durable.

Referring to claim 5, Blythe as modified by Byrne and Kakimoto et al. and Blythe as modified by Byrne and Mickey does not disclose the ratio of binder to rubber is 16% by weight. However, this limitation is found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and Kakimoto et al. and Blythe as modified by Byrne and Mickey and add the ratio of binder to rubber being 16% by weight, so as to allow for the device to be strengthened and thus more durable.

Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blythe as modified by Byrne as applied to claim 1 above, and further in view of Kakimoto et al. or Mickey.

Referring to claim 15, Blythe as modified by Byrne does not disclose the second binder is isocyanate polyurethane. Kakimoto et al. and Mickey each disclose a layer of material comprising EPDM and a polyurethane isocyanate binder – see column 4 lines 15-65 of Kakimoto et al. and paragraphs [0016] thru [0018] of Mickey. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the binder being isocyanate polyurethane of Kakimoto et al. or Mickey, so as to allow for the device to be strengthened and thus more durable.

Referring to claim 16, Blythe as modified by Byrne and Kakimoto et al. and Blythe as modified by Byrne and Mickey both do not disclose the ratio of binder to rubber is 20% by weight. However, this limitation is found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and Kakimoto et al. and Blythe as modified by Byrne and Mickey and add the ratio of binder to

rubber being 20% by weight, so as to allow for the device to be strengthened and thus more durable.

Referring to claim 17, Blythe as modified by Byrne and Kakimoto et al. and Blythe as modified by Byrne and Mickey further discloses the EPDM is granular – see Examples A and B in column 4 of Blythe.

Referring to claim 18, Blythe as modified by Byrne and Kakimoto et al. and Blythe as modified by Byrne and Mickey further discloses the granules are in the range of 1.5 to 6 mm in diameter – see Examples A and B in column 4 of Blythe.

Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blythe as modified by Byrne as applied to claim 1 above, and further in view of U.S. Patent No. 4,205,102 to Schuurink et al.

Referring to claim 19, Blythe as modified by Byrne does not disclose the binder contains aliphatic diisocyanate. Schuurink et al. does disclose the binder contains aliphatic diisocyanate – see for example claim 3. Therefore, it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the binder containing aliphatic diisocyanate of Schuurink et al., so as to allow for the device to be strengthened and thus more durable.

Referring to claim 20, Blythe as modified by Byrne and Schuurink et al. further discloses the EPDM granules are in the range of 1.5 to 6 mm in diameter - see Examples A and B in column 4 of Blythe.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blythe as modified by Byrne as applied to claim 1 above.

Referring to claim 21, Blythe as modified by Byrne does not disclose the base layer 2 to 3 inches thick and the wear layer is 3/8 to 1/2 inch thick. However, these limitations are found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the base layer being 2-3 inches thick and the wear layer being 3/8-1/2 inch thick, so as to allow for the device to be of sufficient size to be durable for outdoor use while not being too bulky for transport.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blythe in view of Byrne and further in view of Kakimoto et al. and Mickey.

Referring to claim 22, Blythe discloses a structure for use on the ground for people to walk upon comprising, a base layer of rubber – see column 1 lines 1-20, and a wear layer of EPDM and a binder on top of the base layer – see column 1 lines 1-20 and Examples A and B in column 4. Blythe does not disclose the base layer has a binder. Byrne does disclose the base layer – at 16 comprises rubber and a binder – see column 4 lines 7-64. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Blythe and add the base layer with binder of Byrne, so as to allow for the components of the base layer to be securely held together. Blythe as modified by Byrne further discloses the rubber of the base layer is a butadiene rubber from tires – see column 4 lines 17-27 of Byrne. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Blythe and add the base layer with rubber and binder of Byrne, so as to allow for the components of the base layer to be securely held together and thus more durable. Blythe as modified by Byrne further discloses the butadiene rubber is in granular form – see column 1 lines 1-20 of Blythe and column 4 lines 17-27 of Byrne. Blythe as modified by Byrne further discloses the butadiene rubber is in the form of

peelings and/or buffings - see column 4 lines 7-64 of Byrne. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the peelings and buffings of Byrne, so as to allow for the device to be easier to manufacture. Blythe as modified by Byrne further discloses a porous base layer - see the abstract of Byrne and the weight percentage of rubber granules and peelings or buffings is varied in amount relative to one another to increase or decrease the porosity of the base layer - see columns 4-5 of Byrne where the amount of rubber in the device can be varied to differing percentages of weight of the device. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the porous base layer of Byrne, so as to allow for proper drainage through the device during use. Blythe as modified by Byrne does not specifically disclose varying the weight percentages of the granules and peelings or buffings to increase the porosity depending on tree density around the device. However, these are product by process limitations in an apparatus claim and therefore these limitations are considered but they offer no further structural limitations to the apparatus claims and it is deemed that the device of the European patent can be made using these product by process limitations so as to allow for the device to have the desired material properties. Blythe as modified by Byrne does not disclose the mixture of granules to peelings or buffings is 70% granules and 30% peelings or buffings to provide a second porosity and the mixture of 50% granules and 50% peelings or buffings to provide a first porosity. However, these are limitations found through experimentation and it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the mixture of either 50 or 70% buffings and either 30 or 50% peelings or buffings, so as to allow for the device to be of a natural appearance. Blythe as

modified by Byrne does not disclose the second binder is isocyanate polyurethane. Kakimoto et al. and Mickey each disclose a layer of material comprising EPDM and a polyurethane isocyanate binder – see column 4 lines 15-65 of Kakimoto et al. and paragraphs [0016] thru [0018] of Mickey. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Blythe as modified by Byrne and add the binder being isocyanate polyurethane of Kakimoto et al. or Mickey, so as to allow for the device to be strengthened and thus more durable.

Response to Arguments

6. Regarding claim 1, the European patent EP 0135595 discloses a porous base layer of a combination of butadiene rubber in a first weight percentage and peelings or buffings in a second weight percentage and a first binder – see the English abstract and a wear layer of ethylene propylene diene monomer (EPDM) and a second binder on top of the base layer - see the English abstract which describes a first layer being hardened and then adding another layer of EPDM and a binder. Further, as seen in the English translation of the European patent the device is made into web-like materials and can be used outdoors and therefore has porous properties. The claimed features of varying the weight percentages of the butadiene rubber and the peelings or buffings are product by process limitations in an apparatus claim and do not add any structural limitations to the apparatus claim.

Regarding claim 5, the limitations of the ratio of binder to butadiene rubber are design parameters that can be determined through experimentation and can be adjusted as needed by the user depending on the material properties needed for a particular application.

Regarding claim 7, the Byrne reference US 5396731 does disclose the rubber granules are in the range of 1.5mm to 6mm – see for example column 4 lines 17-27. Applicant's arguments are not to the specific claim limitations found in claim 7.

Regarding claims 10-11, the ratio of granules to peelings or buffings is limitations found through experimentation that can be modified to get the desired material properties of the user.

Regarding claims 15-18, applicant relies upon the same arguments as to claim 1 and therefore see the response to these arguments above in this section of this office action.

Regarding claims 19-21, applicant relies upon the same arguments as to claim 1 and therefore see the response to these arguments above in this section of this office action.

Regarding claims 1, 3-5, 7 and 10-21, Byrne discloses the butadiene rubber is in granular form – see column 4 lines 17-27 of Byrne. Byrne further discloses the butadiene rubber is in the form of peelings and/or buffings - see column 4 lines 7-64 of Byrne. Byrne further discloses a porous base layer - see the abstract of Byrne and the weight percentage of rubber granules and peelings or buffings is varied in amount relative to one another to increase or decrease the porosity of the base layer - see columns 4-5 of Byrne where the amount of rubber in the device can be varied to differing percentages of weight of the device.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID J. PARSLEY whose telephone number is (571)272-6890. The examiner can normally be reached on Monday-Friday from 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/David J Parsley/
Primary Examiner, Art Unit 3643